

**DRAFT**  
**Decision Notice**  
**and**  
**Finding of No Significant Impact**

**Glen Canyon-Pinnacle Peak 345-kV Transmission Lines Wildfire Risk  
Reduction Project**

**USDA Forest Service  
Coconino National Forest  
Coconino and Yavapai Counties, Arizona**



## **Background**

The Glen Canyon-Pinnacle Peak 345 kV Wildfire Risk Reduction project serves to update the existing operation and maintenance program to include all transmission facilities and access roads into one comprehensive and proactive vegetation management and right-of-way maintenance project (Project). This project focuses on vegetation management in areas outside of

Mexican spotted owl habitat for the existing 345 kV transmission line managed by the Western Area Power Administration (Western) that traverses the entire length of the Coconino National Forest, a distance of approximately 90 miles.

The Glen Canyon-Pinnacle Peak 345 kV transmission lines were constructed in 1966 on self-supporting lattice steel structures; the transmission lines are located predominantly in Coconino and Yavapai Counties, Arizona, east of I-17. The Glen Canyon-Flagstaff and Flagstaff-Pinnacle Peak projects have two adjacent and parallel transmission facilities within their cumulative rights-of-way. Each individual transmission facility has an existing right-of-way of 150 feet, for a cumulative right-of-way width of 300 feet. When the transmission lines were initially constructed in 1966, vegetation within the 300-foot right-of-way area was removed and/or altered from its natural state. Since that time, Western has managed vegetation in the transmission line right-of-way by conducting periodic line patrols and then mowing, cutting, and disposing of vegetation in problem areas where vegetation was identified as being too close to the lines. Most heavily forested areas under and directly adjacent to the transmission line have only been managed for hazard vegetation as defined in the 2008 Biological Opinion for the Phase II Utility Maintenance in Utility Corridors on Arizona Forests. As a result, successional vegetation growth has occurred, resulting in large woody species (e.g., ponderosa pine, Gambel oak, pinyon pine, juniper, and other trees) to re-establish within the rights-of-way.

In the last several years the National Electric Reliability Code has been updated to ensure that major energy transmission lines would be more reliable and would continue to benefit the public by virtue of uninterrupted service. These updates (FAC-003-1 [NERC 2006] and FAC-003-2 [NERC 2011]) specifically require the development and implementation of a program to manage vegetation through regular inspections and treatments to maintain transmission lines in a safe and reliable operating condition.

To comply with these new standards, this project is specifically designed to address the potential for service outages from trees growing into the line, falling into the line, or creating a fire hazard to the transmission lines and structures. In addition, trees that pose an immediate hazard to the safe and reliable operation of the Project outside of the right-of-way are also considered to be part of the Project area. Potential danger trees, defined as trees located within or adjacent to the right-of-way that present a hazard to employees, the public, or power system facilities, may be identified as far as 60 feet outside the edge of the right-of-way (USFS 2008). To account for potential danger trees, the Project area includes an additional 60 feet beyond both right-of-way edges, for a total Project area width of 420 feet.

On February 26, 2013; the Coconino National Forest supervisor signed a Decision Memo and Finding of No Significant Impact based on the Glen Canyon-Pinnacle Peak 345 kV Transmission Line Vegetation Management Project Environmental Assessment (EA). The purpose of this decision was to address the eminent wildfire hazard that currently exists as a result of large trees falling into the transmission lines.

This decision was appealed by the Center for Biological Diversity and the decision was remanded on administrative appeal under 36 CFR 215 due to three issues related to the Mexican spotted owl (MSO):

- The EA and project record failed to demonstrate compliance with the Coconino Forest Plan standard to survey all potential MSO habitat within ½ mile of the perimeter of the proposed treatment area.
- The EA and project record failed to demonstrate compliance with the Coconino Forest Plan restrictions on removal of conifer trees and treatment within core areas of MSO Protected Activity Centers (PACs) by allowing harvest of trees 9 inches in diameter or larger within PACs, and by allowing treatment within 100-acre core areas.
- The EA and project record failed to demonstrate compliance with the Coconino Forest Plan requirements to save all trees larger than 24 inches in diameter in MSO restricted habitat.

While the vegetation management of the Glen Canyon-Pinnacle Peak 345kV transmission line was fully consulted under the Endangered Species Act and accounted for in a Biological Opinion (BO), the Coconino National Forest Plan includes language based on the out-of-date 1995 Mexican Spotted Owl Recovery Plan. While the Recovery Plan may have been revised and replaced by a 2012 Mexican Spotted Owl Recovery Plan, the language in the Forest Plan still needs to be addressed. Thus, the decision did not meet the language in the Forest Plan itself and a Forest Plan amendment was required to allow management activities that do not meet Forest Plan direction related to the Mexican spotted owl.

This decision is meant to authorize pro-active vegetation management on the Coconino National forest within the Glen Canyon-Pinnacle Peak 345-kV transmission line corridor to meet National Electric Reliability Code standards in compliance with the current Coconino National Forest Plan.

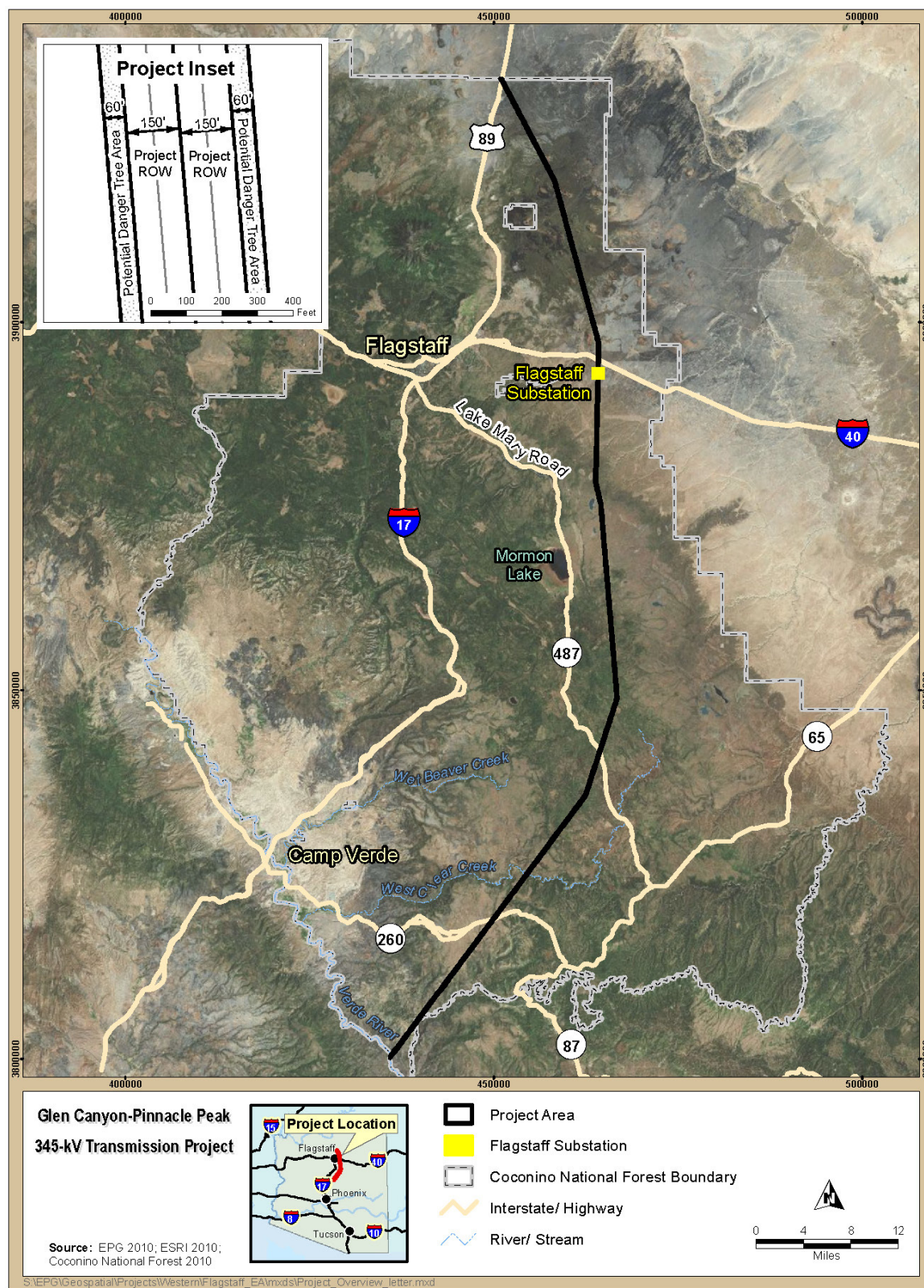


Figure 1: Project Area Overview

## Decision

After consideration of the Glen Canyon-Pinnacle Peak 345 kV Transmission Line Environmental Assessment (EA), I have decided to approve the Proposed Action Alternative with additional limitations for treatments in Mexican spotted owl habitat. Recent events in the Southwest, such as the 2011 Las Conchas wildfire, clearly point to the importance of wildfire risk mitigation through the appropriate management of vegetation adjacent to power lines (Santa Fe New Mexican 2011). Even though the 2012 Mexican Spotted Owl Recovery Plan identifies wildfire as the number one threat to the species, this decision limits vegetation treatment in Mexican spotted owl habitat to assure compliance with the Coconino National Forest Plan. Without a completely new environmental analysis process to address Forest Plan direction related to the Mexican spotted owl, the decision would not be defensible against administrative review. The Forest may re-visit the National Environmental Policy Act process to address vegetation management in areas within Mexican spotted owl habitat that could result in wildfire ignitions, but this process is likely to take one or more years.

This alternative would allow for the authorization or modification of a special use permit for ongoing vegetation management outside of Mexican spotted owl habitat within and adjacent to right-of-way and access road maintenance for the Glen Canyon-Pinnacle Peak 345 kV Transmission Line on the Coconino National Forest. This alternative meets the project's purpose and need by reducing the risk of wildfire from forest vegetation and transmission line contact (or arcing) and moving toward compliance with recent changes in the National Electric Reliability Code standards for transmission line reliability. This decision would enable mitigation of risk of a wildfire ignition which would greatly impact or destroy Forest resources such as wildlife, vegetation, and water quality while providing for key protections for the Threatened Mexican spotted owl.

This decision will address the appeal remand points by incorporating the additional following requirements:

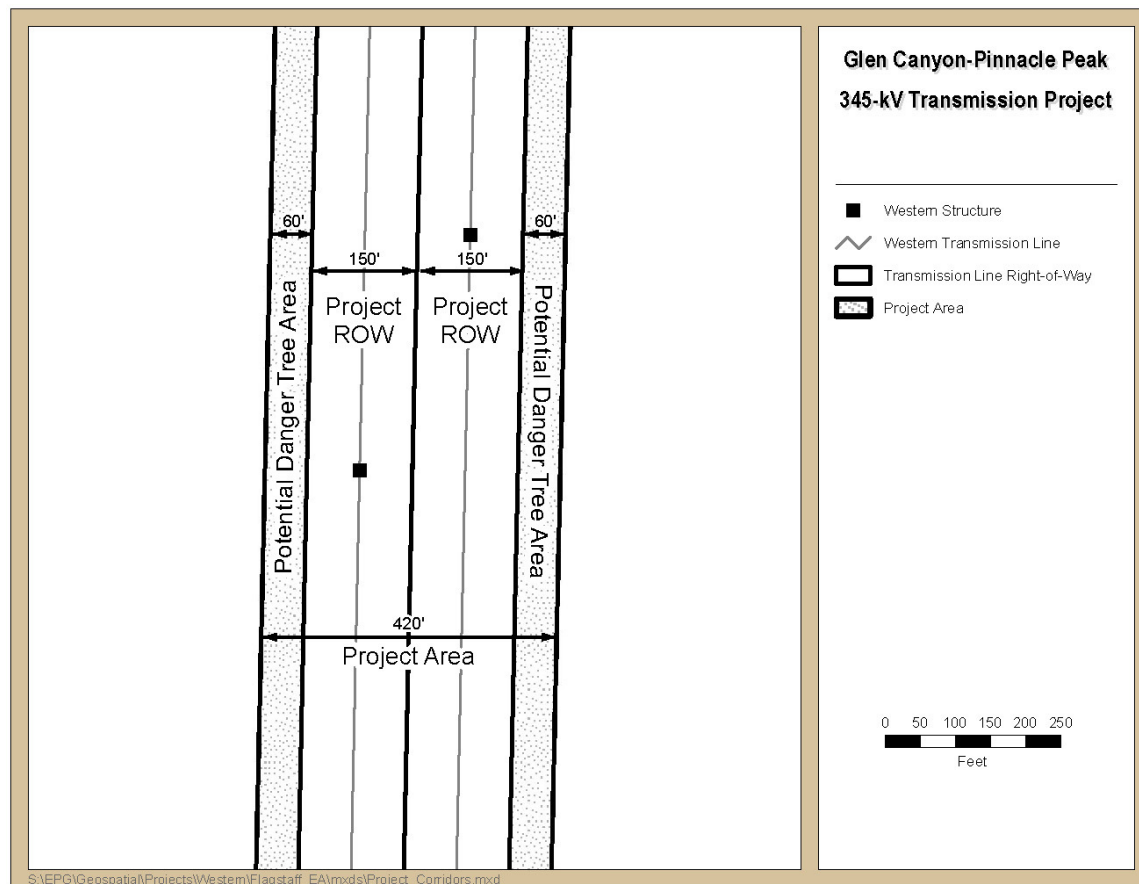
- Survey all potential MSO habitat within ½ mile of the perimeter of the proposed treatment area prior to treatments.
  - Potential habitat requiring survey is identified in Appendix A of this decision. Potential habitat requiring survey may change based on surveys or other information that has become available since this decision. Western should confer with a Forest Service biologist prior to treatments to identify potential MSO habitat within the project area.
  - If surveys identify the presence of new, additional Mexican spotted owls, protected habitat would be identified and management of this area would follow requirements in this decision for Protected Mexican spotted owl habitat.
- No vegetation treatment would be authorized in the 100-acre Mexican spotted owl core areas
- No trees larger than 24-inches diameter-at-breast-height will be removed in restricted habitat

While these additional requirements will not fully address the potential for wildfire starts from trees falling into the powerline in portions of Mexican spotted owl habitat, it will meet the purpose and need of reducing wildfire risk and increasing transmission line reliability along the length of the line. Mexican spotted owl habitat makes up less than 10% of the length of the transmission line across the Forest. Hazard vegetation as defined in the 2008 Biological Opinion for the Phase II Utility Maintenance in Utility Corridors on Arizona Forests will continue to be removed along the entire length of the transmission where vegetation meets the definition of “Hazard Vegetation” on page 6 of the BO. As discussed in the Environmental Assessment, when vegetation reaches a hazardous condition for continued operation of the transmission line, Western may identify it as an emergency situation and immediately remove this vegetation.

This decision is specifically meant to decrease the potential for emergency situations, by facilitating timing and other techniques to minimize impacts of vegetation cutting and removal within and adjacent to the right-of-way corridor. As a result, the implementation of this decision is expected to decrease the overall impacts on important wildlife such as the Mexican spotted owl and the vegetation and habitat components on which they depend.

## **Vegetation Removal**

The Proposed Action consists of two primary components: (1) initial vegetation removal within and adjacent to the rights-of-way, and (2) vegetation management and right-of-way maintenance for Western’s desired right-of-way condition. While almost all of the vegetation in the transmission line right-of-way has been previously disturbed since the 1966 transmission line construction and ongoing maintenance, this approval includes a renewed effort to clear the transmission line right-of-way of vegetation and danger trees. This vegetation removal will include nearly all vegetation (except grasses, forbs, and some small shrubs) within the rights-of-way to satisfy the purpose and need for safely and reliably operating transmission facilities while improving the efficiency and effectiveness of vegetation management. Exceptions to vegetation removal for wildlife and scenic resources are included in the project conservation measures, below. In addition, trees that pose an immediate hazard to the safe and reliable operation of the Project outside of the right-of-way are also considered to be part of the Project area. Potential danger trees, defined as trees located within or adjacent to the right-of-way that present a hazard to employees, the public, or power system facilities, may be identified as far as 60 feet outside the edge of the right-of-way. To account for potential danger trees, the Project area includes an additional 60 feet beyond both right-of-way edges, for a total Project area width of 420 feet (Figure ).



**Figure 2. Project Area Dimensions**

Where terrain conditions (i.e., certain canyon, wash, steep slope, and/or drainage crossings) provide for higher conductor clearances, typically a minimum of 50 to 100 feet above ground level (AGL), vegetation may not conflict with the safe and reliable operation of the transmission lines, and thus would not necessitate removal. These areas would be evaluated on a case-by-case basis and identified by Western as preserve-in-place areas where vegetation would not be removed.

In addition to vegetation removal within the limits of the right-of-way, danger trees outside of the right-of-way would also be removed. These danger trees are defined as trees located within or adjacent to the right-of-way that present a hazard to employees, the public, or power system facilities. Characteristics used in identifying a danger tree include but are not limited to the following:

- encroachment within the safe distance to the conductor as a result of the tree bending, growing, swinging, or falling toward the conductor
- deterioration or physical damage to the root system, trunk, stem or limbs, and/or the direction and lean of the tree
- vertical or horizontal conductor movement and increased sag as a result of thermal, wind, and ice loading
- potential for arcing with Project facilities in the event of wildfire, or providing wildfire fuel within the right-of-way

Danger trees within the right-of-way would be treated using either mechanical or manual removal methods, while danger trees outside of the right-of-way would only be treated using manual removal methods.

After the rights-of-way have been sufficiently cleared of vegetation, vegetation would be managed within the project area for stable, low growth plant communities free from noxious or invasive plants. These communities will typically be comprised of herbaceous plants and low growing shrubs which ideally are native to the local area. Vegetation on the bordering areas of transmission line rights-of-way can be managed so that increased tree height is allowed in relation to an increasing distance from the transmission line.

Methods for vegetation removal consist of mechanical and manual methods. Vegetation within the rights-of-way would be removed predominantly through mechanical methods. Where access, terrain conditions, or resource sensitivity precludes the use of mechanical methods, manual vegetation removal methods (i.e., hand crews) would be employed. See the detailed description of the proposed action in the Final EA for more specific information about vegetation removal and disposal activities.

### Access Routes

To conduct vegetation management activities, established roads and access routes would be used to approach the right-of-way (except for the removal of danger trees outside the right-of-way, as necessary). No new roads would be created to access the Project rights-of-way. If Project rights-of-way are not accessible by existing roads, Western would drive to the nearest location and crews would walk in with the necessary equipment to properly maintain vegetation.

Utility vehicles may travel on or off-road within Project rights-of-way, but do not typically travel off-road outside of the rights-of-way. Where off-road travel would be necessary outside the Project rights-of-way, only rubber tired vehicles would travel off-road, with no off-road travel through wetlands or running streams. See the detailed description of the proposed action in the Final EA for more specific information about motorized access.

### Project Conservation Measures

This decision incorporates the following project conservation measures (PCM):

PCM #	Description	Responsible Party
<b>Multiple Resources</b>		
1	All vehicle movement outside the right-of-way would normally be restricted to pre-designated access or existing system roads.	Western/Contractor
2	The boundary of vegetation management and danger tree removal activities would normally be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents would be applied to rocks, or any vegetation that is to remain in place, to indicate survey or construction activity limits.	Western/Contractor

PCM #	Description	Responsible Party
3	To limit new disturbance, existing access roads in the Project area would be used to the extent practicable, provided that doing so does not additionally impact resource values.	Western/Contractor
4	Ensure all crews entering construction site have been provided training to recognize and respond to occurrences of cultural and natural resources and optimally protect the environment.	Western
5	Fences and gates would be repaired or replaced to their original pre-disturbed condition as required by the landowner or the Coconino National Forest Authorized Officer if they are damaged or destroyed by vegetation management and right-of-way maintenance activities. New temporary and/or permanent gates will be installed only with the permission of the landowner or Coconino National Forest.	Western/Contractor
6	During vegetation management and right-of-way maintenance activities for the transmission line(s), the right-of-way would be maintained free of non-biodegradable debris. Slash will be left in place or disposed of in accordance with requirements of the Biological Assessment (BA) prepared for maintenance in utility corridors on the Coconino National Forest.	Western/Contractor
7	All existing roads will be left in a condition equal to their condition prior to vegetation management and right-of-way maintenance activities along the transmission line.	Western/Contractor
8	There will be no open burning of trash generated by vegetation management and right-of-way maintenance crews.	Western/Contractor
9	Caves, mine tunnels, and rock outcrops will not be entered, climbed upon, or otherwise disturbed.	Western/Contractor
10	Vehicles will be inspected daily for fluid leaks before entering the Coconino National Forest.	Western/Contractor
11	At canyon, wash, river, stream crossings where appropriate conductor-vegetation clearances can be maintained, vegetation will be left in place to the extent feasible to allow for safe and reliable operation of the project facilities.	Western/Contractor
12	Western and its contractors will comply with all applicable federal and state regulations regarding fire suppression, including but not limited to having vehicles be equipped with a shovel and fire extinguisher, and the use of spark arrestors on combustion engines. Verification of daily fire levels during fire season will occur, and in some cases temporary work stoppage may be required due to high fire levels.	Western/Contractor
13	Helicopter refueling away from existing airports would be accomplished by landing the helicopter in a parking lot or other open, previously disturbed area near a well-established road. A tanker truck would travel on the well-established road to meet the helicopter for refueling. Helicopter refueling would not be conducted within 0.5 mile of any: <ul style="list-style-type: none"> <li>• Mexican spotted owl PAC</li> <li>• stream or pond occupied with threatened or endangered fish and/or amphibians</li> <li>• yellow-billed cuckoo, peregrine falcon, and bald eagle occupied habitat during this species' breeding season</li> </ul>	Western/Contractor

PCM #	Description	Responsible Party
<b>Biology Resources</b>		
14	All vegetation management and right-of-way maintenance activities shall be conducted in a manner that will minimize disturbance to drainage channels, and intermittent and perennial stream banks to the extent practicable.	Western/Contractor
15	In areas where mechanical vegetation removal is not permitted or feasible (e.g., sensitive resource areas, terrain constraints, etc.), vegetation would be left in place wherever possible, and original contour would be maintained to avoid excessive root damage.	Western/Contractor
16	Monitoring of vegetation management and right-of-way maintenance activities may be required in some areas to ensure that species listed under the ESA or as specified by the CNF and state or county authority as sensitive or of concern are avoided. Additionally, if Bald or Golden Eagle nests are identified in the project area, seasonal restrictions on vegetation management and right-of-way maintenance in affected areas would be implemented where applicable according to current USFWS protocol to comply with the Bald and Golden Eagle Protection Act.	Western/Contractor
17	Measures to control noxious weeds will be incorporated into project planning, implementation, and monitoring. Western will clean seeds from ground-disturbing equipment before entering or moving between project areas. In areas of known occurrences of state-listed noxious weeds, a Western-approved botanist would identify and flag noxious weeds to be avoided. Methods of vegetation removal may be altered as appropriate to avoid the spread of noxious weeds.	Western/Contractor
18	The appropriate USFS Ranger District should notify Western of new or existing noxious weed hotspots.	CNF
19	In areas of known occurrences of, or suitable habitat for special-status plant species, a Western-approved botanist would identify and flag special-status plants to be avoided. Methods of vegetation removal would be altered as appropriate to avoid impacts to special-status plant species.	Western/Contractor
20	Field monitoring personnel (i.e., archaeological and biological monitors) will have access to the operations and maintenance GIS database in the field to be able to identify sensitive resources and associated PCMs.	Western/Contractor
21	To minimize impacts to Chiricahua and northern leopard frogs, wet areas will be avoided to the extent practicable and all activity will be minimized during winter and other wet periods. This would minimize the potential for the spread of the pathogenic chytrid fungus ( <i>Batrachochytrium dendrobatidis</i> ), which can be fatal to frogs. If wet areas cannot be avoided, mud and debris will be removed from vehicles and decontaminated with quaternary ammonia or other USFS approved decontaminants to kill the fungus prior to moving to new areas.	Western/Contractor
22	To minimize disturbance to northern goshawk during breeding, nesting, and fledging seasons, avoid work between March 1 and September 30 within post-fledging areas (PFA). This includes the use of loud machinery within 0.25 mile of the PFA.	Western/Contractor
23	Coordinate disposal methods with the Forest Service District and, if appropriate/feasible, leave large (>8 inches) logs at edge of right-of-way in or adjacent to northern goshawk PFAs.	Western/Contractor/CNF

PCM #	Description	Responsible Party
24	To minimize impacts to riparian habitat and migratory birds, areas within 250 feet of the Fossil Creek and Verde River crossings will be treated using manual methods of vegetation removal and only danger trees will be removed. Dense vegetation will be thinned as necessary to minimize fire hazards within the rights-of-way. Additionally, this work will be done outside of the breeding season (April 1 through August 15) for migratory birds such as yellow-breasted chat.	Western/Contractor
25	<p>To protect nesting birds (birds not specifically protected by PCMs but protected by the Migratory Bird Treaty Act), whose nests could occur within the right-of-way, Western and its subcontractors will perform vegetation management and right-of-way maintenance activities outside the nesting season, which runs from April 1 through August 15 in the CNF. Alternatively, a qualified biologist will conduct nesting-bird surveys prior to project activities. For special-status birds, see PCM 16 and Mexican Spotted Owl PCMs.</p> <ul style="list-style-type: none"> <li>• An additional survey may be required if gaps between the survey and the project activity exceed three weeks.</li> <li>• Should an active nest be discovered, the qualified biologist will establish an appropriate buffer zone (in which operations and maintenance activity is not allowed) to avoid disturbance in the vicinity of the nest. Maintenance activities will not take place until the biologist has determined that the nestlings have fledged or that maintenance activities will not adversely affect adults or newly fledged young.</li> <li>• Alternatively, the qualified biologist will develop a monitoring/mitigation plan that permits the maintenance activity to continue in the vicinity of the nest while monitoring nesting activities to ensure that the nesting birds are not disturbed. Biological monitors would have the authority to modify or halt activities if deemed necessary based on behavior of nesting birds.</li> </ul>	Western/Contractor
<b>Mexican Spotted Owl</b>		
26	Monitor and report proposed utility actions annually. This would include tree species, location, condition and size class, information as outlined in Appendix D of the Biological Assessment.	Western/Contractor
27	Avoid ground work (use of equipment) within PACs between March 1 and August 31.	Western/Contractor
28	Avoid use of loud machinery within 0.25 mile of PACs between March 1 and August 31, with goal to limit noise levels at PAC boundary to < 56 decibels (dbA).	Western/Contractor
29	Avoid landing of helicopters in PACs or within 0.25 mile of PACs between March 1 and August 31.	Western/Contractor
30	For hazard line maintenance and/or vegetation hazard treatment in a Mexican Spotted Owl PAC during the breeding season, coordinate the timing of the hazard treatments such that work is consolidated into the least number of days and least number of trips in and out of the PAC to minimize the duration and frequency of disturbance to the Mexican Spotted Owl as much as possible.	Western/Contractor
31	Coordinate disposal methods with the appropriate Forest Service Ranger District and, if appropriate/feasible, leave large (>12 inches) logs at edge of right-of-way in or adjacent to PACs.	Western/Contractor/CNF

PCM #	Description	Responsible Party
32	When feasible, schedule treatments of hazard vegetation after breeding season (i.e., defer activity to later date when low priority or when not an imminent threat to safe operation of lines/structures).	Western/Contractor
33	Trees > 24 inches diameter at breast height within PACs be retained unless over-riding management situations (i.e. the trees qualify as Hazard vegetation under the 2008 Biological Opinion) require their removal to protect human safety and/or property.	Western/Contractor
34	Retention of hardwood, large downed logs, large trees, and snags is recommended in PACs and Mexican Spotted Owl habitat to an extent that it does not significantly impede the overriding objective of reducing the risk of high-severity fire in Mexican Spotted Owl habitat.	Western/Contractor
Add-on #1	<p>Survey all potential MSO habitat within ½ mile of the perimeter of the proposed treatment area prior to treatments.</p> <ul style="list-style-type: none"> <li>Potential habitat to which this applies is identified in Appendix A of this decision. Potential habitat requiring survey may change based on surveys or other information that has become available since this decision. Western should confer with a Forest Service biologist prior to treatments to identify potential MSO habitat within the project area.</li> <li>If surveys identify the presence of new, additional Mexican spotted owls, protected and core habitat would be identified and management of these areas would follow requirements in this decision for Protected Mexican spotted owl habitat and core areas.</li> </ul>	Western/Contractor
Add-on #2	Avoid all vegetation treatment in the 100-acre Mexican spotted owl core areas.	Western/Contractor
Add-on #3	No trees larger than 24-inches diameter-at-breast-height will be removed in restricted habitat.	Western/Contractor
<b>Water Resources</b>		
35	Watering facilities (e.g., tanks, developed springs, water lines, wells, etc.) would be repaired or replaced if they are damaged or destroyed by vegetation management and right-of-way maintenance activities to their predisturbed condition as required by the landowner or CNF.	Western/Contractor
36	Run-off control structures, diversion ditches, erosion-control structures, and energy dissipaters will be cleaned, maintained, repaired, and replaced to meet the standards set by applicable permits and the Storm Water Pollution Prevention Plan (SWPPP), or where such a plan is inapplicable, similar standards set by Western or the applicable federal land manager.	Western/Contractor
37	Sediment-control devices (e.g., placement of native rock, etc.) will be used at all dry wash crossings as determined in the SWPPP for the Project.	Western/Contractor

PCM #	Description	Responsible Party
38	Wet areas will be avoided to the extent practicable and all activity will be minimized during winter and other wet periods to prevent damage (e.g., rutting, erosion, soil compaction). If wet areas cannot be avoided (e.g., emergency situations, etc.), Western will use wide-track or balloon tire vehicles and equipment or timber mats and install sediment control devices where necessary.	Western/Contractor
39	To minimize impacts to soils and wetlands, mechanical clearing of vegetation will be prohibited within 100 feet of a wetland during the wet season (July 1 to September 30 and December 1 to March 31).	Western/Contractor
40	All equipment will be stored, fueled, and maintained a minimum of 300 feet from a stream or wetland. If equipment is fueled and/or maintained within CNF boundaries, a spill kit with a minimum capacity of 40 gallons will be required on-site where refueling/equipment maintenance activities occur.	Western/Contractor
<b>Visual Resources</b>		
41	Material storage and staging areas will be selected to minimize views from public roads, trails, and nearby residences, to the extent feasible. During vegetation management and right-of-way maintenance activities, the work site will be kept clean of debris and management and maintenance waste. For areas where slash and vegetation debris will be visible from sensitive viewing locations, materials will be disposed of in a manner that is not visually evident, in coordination with CNF, and in compliance with the BA.	Western/Contractor/CNF
42	Vegetation management and right-of-way maintenance activities will be conducted in a manner that limits unnecessary scarring or defacing of the natural surroundings to preserve the natural landscape to the extent possible. To preserve vegetation screening from public areas, understory vegetation clearing will be minimized to the extent practicable along state highways and near recreation sites, and wherever possible along scenic roadways.	Western/Contractor
43	To minimize visual impacts, only danger trees would be removed within and adjacent to the rights-of-way where the Project crosses Class A landscapes, Concern Level 1 routes/areas, and/or Moderate Scenic Integrity Objective designations, and where removal of vegetation would result in moderate to high landscape contrast.	Western/Contractor
<b>Cultural Resources</b>		
44	Prior to conducting planned vegetation clearing within the boundaries of a known cultural site, Western would prepare a Monitoring Plan detailing procedures for cultural resource training, monitoring, reporting, and procedures for addressing unanticipated discoveries. This plan would be submitted to CNF, SHPO, and interested Tribes for review and concurrence.	Western/Contractor/CNF/SHPO
45	Vehicles and equipment will be staged outside of cultural resource sites.	Western/Contractor
46	Only the following activities are allowed in cultural sites: vehicular travel will only take place on existing roads, manual cutting of vegetation, and disposal of cut vegetation consistent with Western and CNF management guidelines.	Western/Contractor
47	No slash will be placed within fire sensitive sites such as historic building remains, other wood artifacts, adjacent to rock shelters or caves where fire sensitive artifacts may exist, or adjacent to rock art panels.	Western/Contractor

PCM #	Description	Responsible Party
48	No ground disturbing activities will occur within the boundaries of cultural sites.	Western/Contractor
49	A Western- and CNF-approved archeological monitor will be present when vegetation removal occurs within the boundaries of sensitive cultural sites, including those containing petroglyphs or standing historic or prehistoric architecture, or other sites designated as sensitive by the CNF.	Western/CNF
50	If a danger tree is identified as a potential historic feature (blazed tree, phoneline insulator tree, dendroglyph tree, etc.) Western will coordinate with the CNF to determine the appropriate mitigation, should any measures be required.	Western/Contractor/CNF
51	Where danger trees are removed outside of the right-of-way, trees will be felled to avoid any identified cultural resource sites. If a danger tree cannot be felled to avoid an identified cultural site, felled trees must be lopped and left in place as slash in accordance with the requirements of the Biological Assessment and BO (2008).	Western/Contractor
<b>Geology &amp; Soils</b>		
52	Upon completing ground-disturbing work, all work areas will be left in a condition that facilitates proper drainage, and minimizes erosion.	Western/Contractor
53	All operations and maintenance activities will be in conformance with Western's Integrated Vegetation Management Environmental Guidance Manual	Western/Contractor
54	Where soil has been severely disturbed and the establishment of vegetation will be needed to minimize erosion, appropriate measures, as approved by the CNF, will be implemented to establish an adequate cover of native grass or other native vegetation as needed. Perennial vegetation is preferred to annual vegetation. All mulch and seed will be certified free of noxious weeds.	Western/Contractor/CNF
55	Disturbance and removal of soils and vegetation will be limited to the minimum area necessary for vegetation management and right-of-way maintenance activities.	Western/Contractor
<b>Air Quality</b>		
56	All requirements of those entities having jurisdiction over air quality matters will be adhered to, any necessary dust control plans will be developed.	Western/Contractor
57	Machinery and vehicles will be kept in good operating condition and older equipment will be replaced with equipment meeting Arizona emission standards; appropriate emissions-control equipment will be maintained for vehicles and equipment, per EPA, and Western air-emission requirements. Trucks transporting loose material will be covered or maintain at least 2 feet of freeboard and will not create any visible dust emissions.	Western/Contractor
58	Idle equipment will be shut down when not in active use.	Western/Contractor
59	Fugitive dust will be minimized during vegetation management and right-of-way maintenance activities by adhering to speed limits and minimizing blading activities to the extent practicable.)	Western/Contractor

PCM #	Description	Responsible Party
<b>Land Use</b>		
60	Western will coordinate with CNF and post proper signage in areas requiring temporary closure or limited access due to vegetation management and right-of-way maintenance activities.	Western/Contractor/CNF
61	No mechanical vegetation removal methods will occur within wilderness areas. In addition, vegetation removal, management, and/or right-of-way maintenance activities necessary within wilderness areas will not be conducted during weekends or federal holidays.	Western/Contractor
<b>Noise</b>		
62	All vehicles and equipment will be equipped with required exhaust-noise-abatement devices.	Western/Contractor
<b>Recreation</b>		
63	Western will direct members of the public to alternate trails or recreation areas if blocked by machinery or for safety purposes.	Western/Contractor
64	Closure of recreation areas will be minimized to the extent practicable during weekends and Federal holidays between Memorial Day and Labor Day.	Western/Contractor/CNF
65	No motorized or mechanized tools will be used to clear vegetation in wilderness (including motor vehicles). Crews will walk in or use primitive means to transport needed hand tools and will remove vegetation using non-motorized tools. A Minimum Requirement Decision Guide will be completed and receive Forest Service review and approval if any other vegetation removal methods are proposed.	Western/Contractor/CNF
66	Minimize use of overhead flights over designated Wilderness.	Western
<b>Public Health &amp; Safety</b>		
67	Signs and/or flags will be erected in areas of public access to indicate vegetation management and right-of-way maintenance activities are taking place; workers will be conspicuous by wearing high-visibility vests and hardhats.	Western/Contractor
68	<p>With regard to hazardous materials:</p> <ul style="list-style-type: none"> <li>• Hazardous materials will not be drained onto the ground, into streams, or into drainage areas.</li> <li>• Any release, threat of release, or discharge of hazardous materials within the project area in connection with project activities will be cleaned up and/or remediated, in accordance with applicable federal, state, and local regulations.</li> <li>• All construction waste, including trash and litter, other solid waste, petroleum products, and other potentially hazardous material will be removed in accordance with applicable federal, state, and local regulations.</li> <li>• Discovery of, or the accidental discharge of, a significant amount of hazardous materials will be immediately reported to Western's dispatch center.</li> <li>• There will be no storage of hazardous materials in the project area without approval from the Western authorized officer.</li> <li>• Upon termination of the permit, a report will be submitted to determine whether there had been site contamination and if so, that the remediation met compliance with applicable laws.</li> </ul>	Western/Contractor

PCM #	Description	Responsible Party
69	Hazardous materials standard operating procedures and applicable PCMs will be written into the contract for vegetation management and right-of-way maintenance work, and contractors will be held responsible for compliance.	Western/Contractor
70	Contractors must submit a spill response plan that is approved by Western. Clean-up actions and costs resulting from contractor misconduct will be the responsibility of the contractor.	Western/Contractor
<b>Transportation</b>		
71	All lane closures or obstructions on major roadways associated with maintenance activities will be restricted to off-peak periods to minimize traffic congestion and delays, and will be coordinated with Arizona Department of Transportation (ADOT).	Western/Contractor

## Decision Rationale

After thorough review of the EA and the Response to Comments, I have determined that the Proposed Action meets the purpose and need of maintaining the Glen Canyon–Pinnacle Peak 345 kV Transmission Lines and access in a manner that: (1) is consistent with applicable laws, orders, standards, practices, and guidance including the Coconino National Forest Plan, (2) protects environmental resources to the extent practicable, while improving the efficiency and effectiveness of vegetation management and right-of-way maintenance activities; and (3) reduces the likelihood of widespread substantial impacts to forest resources from wildfires ignited by vegetation and transmission lines. This decision facilitates more proactive vegetation management to prevent operational hazards and thus moves toward greater consistency with the standards in the National Electric Safety Code; Western Electricity Coordinating Council requirements; North American Electric Reliability Corporation (NERC) reliability standards; Institute of Electrical and Electronics Engineers standards; and Western’s Guidelines, Requirements, Inspections, and Procedures (GRIP), Western O 450.3A, and directives for maintaining system reliability and protection of human safety.

It is extremely important to address wildfire risk in the transmission line corridor. Currently, the Glen Canyon-Pinnacle Peak Transmission line is managed only for “Hazard Vegetation” according to the definition in the 2008 Biological Opinion for Phase II Utility Maintenance in Utility Corridors on Arizona Forests. This means that only those trees that meet this definition can be removed. As a result, this requires regular surveys of the 90-mile transmission line corridor for live or dead standing trees with defects that would cause direct damage to the transmission line. This process is extremely time consuming, inefficient, and regularly results in situations where there are trees without clear defects that can cause wildfire starts. This method doesn’t account for severe weather events, or tree failure that is not clearly attributable to a visible defect.

Power line fires continue to be a main source of some of the most destructive wildfires throughout the western United States (Mitchell 2009). A major reason for this is that programs that only focus on hazard tree removal do not effectively facilitate risk reduction of wildfire ignitions (Guggenmoos 2003). This decision is designed to provide a proactive approach to

prevent wildfire ignitions from the existing transmission lines, which are known to regularly result in devastating wildfires where there is not adequate vegetation management.

Furthermore, transmission line corridors with vegetation maintained to reduce the risk of high-intensity wildfire can be valuable resources for limiting the spread and thus destruction of large, high-intensity wildfires that ignite from other sources. For example, in 2002 firefighters used a well-maintained transmission line corridor to create a backfire to successfully stop the spread of one of the biggest fires in Arizona history – the Rodeo-Chedeski Fire (Johnstone 2008).

Another important issue addressed by this decision is the impact of wildfire on the transmission line. Global climate change is expected to increase the intensity, severity, and incidence of wildfires throughout the west (Williams et al. 2010, Westerling et al. 2006). As a result, the potential exposure of transmission lines to wildfire is expected to increase with time. Research on this issue has shown some transmission lines whose probability of exposure to fire is expected to increase by as much as 40 percent (Sathaye et al. 2011). Should a wildfire burn across the Glen Canyon-Pinnacle Peak 345kV Transmission Line it is likely to affect power to thousands of people and result in emergency repair work that would have much bigger impacts to sensitive habitat than would proactive vegetation management for wildfire risk mitigation.

This decision also includes a great number of conservation measures to minimize impacts to forest resources to the extent practicable by limiting the timing of certain vegetation removal activities, restricting the location of mechanical activities, and identifying specific situations where vegetation should be maintained. In addition, this project is expected to mitigate the risk of wildfire starts from vegetation touching (or getting close enough to initiate an arc event with) the transmission lines, which provides a long-term benefit for wildlife, water quality, scenic integrity, recreation opportunities, and other forest resources.

This decision is also in compliance with the Coconino National Forest Plan and the terms and conditions defined in the July 2008 Biological Opinion issued for vegetation management for utility lines on the Coconino National Forest (CNF).

## **Public Involvement**

Two public scoping meetings were held on February 8<sup>th</sup> and February 9<sup>th</sup>, 2011 in Flagstaff and Camp Verde, Arizona, respectively. Prior to these meetings, on January 21, 2011, approximately 940 scoping notification postcard mailers for these meetings were sent to various agencies, Indian tribes, organizations, businesses, and members of the public. Some of the recipients included members and representatives from the Center for Biological Diversity, Sierra Club AZGFD, USFWS, Arizona State Parks, Arizona Department of Environmental Quality, Arizona Wildlife Conservation, Ft. McDowell Apache Tribe, Hopi Tribe, Navajo Nation, Yavapai Tribe, Havasupai Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation and Yavapai-Prescott Tribe. Newspaper notifications were placed in the Arizona Daily Sun (January 25<sup>th</sup>, 26<sup>th</sup>, and February 5<sup>th</sup>) and Camp Verde Bugle-Verde (January 26<sup>th</sup> and February 6<sup>th</sup>) newspapers prior to the meetings. Website notification was posted on the CNF Schedule of Proposed Actions website two weeks prior to the public meetings. The official start of the scoping period began on January 27<sup>th</sup>, 2011 and included posting on the Coconino National Forest Schedule of Proposed Actions.

A total of two comments were received during the scoping period, one from a member of the public and another from Arizona Game and Fish Department. Both comments were concerned with wildlife and habitat conditions in the CNF as a result of this Project. Copies of these comments are included in the Project record.

The Preliminary EA was made available for public comment on November 20, 2011 and closed on December 20, 2011. During the public comment period for the Draft EA, one comment was received from the Center for Biological Diversity; a copy of this letter along with a comment-by-comment response is included in the Project record.

## **Alternatives Considered**

Alternatives were assessed on their ability to reasonably respond to the purpose and need for action. This section provides the rationale for each alternative identified and eliminated from full EA evaluation.

### **Removal of Vegetation that Conflicts, or has the Potential to Conflict, with Western Conductor-to-Vegetation Clearance Requirements Only Alternative**

Under this alternative, currently approved vegetation removal practices and methods would be used to remove vegetation throughout the Project area that either conflicts, or has the potential to conflict, with Western's required conductor clearances (i.e., 26-foot minimum). In addition, dense stands of vegetation within the right-of-way that do not encroach within the minimum conductor clearance requirements, but present a hazard to the facility due to potential arcing that could occur from smoke plumes in the event of a wildfire, would be removed. In contrast to the Proposed Action, vegetation that would not conflict with these minimum clearance requirements, and that do not pose an immediate wildfire threat to the transmission facilities, would remain in place throughout the Project area.

This alternative would result in more frequent vegetation management and facility maintenance activities. These frequent vegetation management and facility maintenance trips would increase potential for ground disturbance, overall emissions, hazardous material and petroleum spills, long-term intermittent noise levels, and the potential for disturbance to biological resources. In addition, this alternative could increase the potential for service interruption from wildfire within the Project area, as a result of added biomass and wildfire fuels within the Project area. As a result, this alternative was eliminated from further consideration in this EA.

### **Establishment and Management of a Wire Zone and Border Zone Alternative**

Under this alternative, a process of vegetation community conversion would be implemented within the Project rights-of-way. In general, Western would remove vegetation within the existing rights-of-way to establish a wire zone and border zone for vegetation management activities. The wire zone would be defined as the portion of the right-of-way directly beneath the conductors and 10 feet beyond the outside edge of the conductors. The border zone ranges from 10 feet outside the outer phases to the edge of the right-of-way. The wire zone would be managed to promote a low-growing plant community dominated by grasses, herbs, and small shrubs (typically under 3 feet in height at maturity), while the border zone would be managed to preserve or establish small trees and tall shrubs (typically under 25 feet in height at maturity).

Within the wire zone, nearly all existing woody vegetation and shrubs would be removed. Within the border zone, small trees, tall shrubs, and other vegetation up to 25 feet in height at maturity may remain in place, provided the minimum conductor clearances could still be met. This process would continue within the two designated zones until vegetation cover types have been converted to low-growing grasses and forbs in the wire zone, and small trees and tall shrubs in the border zone.

Within the wire zone, this alternative could facilitate Western's purpose to safely and reliably operate the transmission facilities in comparison to the No Action alternative; however, the border zone associated with this alternative would preclude Western from achieving the purpose and need for this Project. The Proposed Action for the rights-of-way creates a fuel break in the event of a wildfire, which minimizes wildfire intensity in the vicinity of Project facilities. Under the wire zone/border zone alternative, the presence of tall shrubs and small trees within portions of the rights-of-way (i.e., border zone) would not be compatible with Western's objective to reduce fuel loads within the rights-of-way. The reduction of fuel loads within the rights-of-way protects Project facilities from the effects of wildfire (i.e., damage to transmission hardware, arcing from nearby vegetation into conductors, etc.) and minimizes service interruption to Western's delivery base. In addition, new NERC standards (NERC Reliability Standard FAC-003-1 AND FAC-003-2) impose costly penalties on utilities where it is demonstrated that outages on transmission facilities is the result of improperly managed vegetation within their rights-of-way. Because of these risks, this alternative was eliminated from analysis in this EA.

### **No vegetation management in any Mexican spotted owl potential habitat**

This alternative was considered but eliminated from detailed study because it doesn't meet the purpose and need for the project. The purpose and need as defined on pages 1-4 and 1-5 in the Environmental Assessment includes

- Providing safe and efficient transmission of power along existing lines.
- Eliminating vegetation that interferes with the safe and reliable operation of the transmission lines and towers. Vegetation near transmission lines may pose a threat to public safety and the environment because of the risk of:
  - Wildfire resulting from arcing (a luminous discharge of current that is formed when a strong current jumps a gap in a circuit or between two electrodes). In the case of the Project, the current jumps the gap from energized conductor to the ground or tree.
  - Trees falling, growing, or bending into the transmission lines and/or structures.

Much of the Mexican spotted owl potential habitat includes stands with the highest percentage of large trees (See Appendix A, which identifies how Mexican spotted owl potential habitat was identified), which due to their height are those most likely to result in a wildfire resulting from arcing or falling into the transmission line and/or structures when they are located in or adjacent to the right-of-way.

## **Required by Other Laws or Regulations**

The planning and decision-making process for this project was conducted in accordance with all applicable laws, regulations, policies and plans. This section briefly describes my findings regarding the legal requirements most relevant to this project decision.

***National Forest Management Act and 36 CFR 219 Regulations***

The Proposed Action complies with the Coconino National Forest Plan, as amended. This project incorporates all applicable forest-wide standards and guidelines and management area direction as they apply to the project area. This decision incorporates additional requirements for management in and adjacent to Mexican spotted potential, restricted and core habitat to ensure it is in conformance with the Plan standards related to the Mexican spotted owl. This project is also in compliance with Coconino National Forest Plan goals and objectives. All required interagency review and coordination have been accomplished.

Effects on threatened and endangered species, Forest Service (Region 3) sensitive species and management indicator species (MIS) that are found or have potential habitat in the project area were also considered. The Proposed Action for this project is the implementation of the action analyzed in the BA for Threatened and Endangered Species – Phase II Maintenance in Utility Corridors on Arizona Forests, February 2008, and subsequent concurrence with determination of effects identified in the BOs issued by the USFWS in July 2008 (Consultation #22410-2007-F-0365) and on June 11, 2013 (Consultation #22410-2006-F-0365-R1). A review of these documents in conjunction with the EA for this project illustrates consistency between the action analyzed in the February 2008 BA and subsequent BOs, and the Proposed Action for this project.

***National Historic Preservation Act (NHPA); Archeological Resources Protection Act; American Indian Religious Freedom Act; Executive Order 11593 (Cultural Resources)***

Western conducted cultural resource investigations to prepare a complete inventory of archaeological sites, and historic buildings and structures, located within or near the Project rights-of-way and access roads. The inventory efforts included a comprehensive literature search to identify and evaluate previous survey and site recording efforts, as well as an intensive pedestrian field survey of the Project rights-of-way and access roads. Due to the high density of sites in the northernmost seven miles of the Project, sites in that area are scheduled for future recordation in accordance with a programmatic agreement (PA) (currently in preparation) among Western, CNF, SHPO, and interested tribes. Based on the project conservation measures in the Proposed Action and the requirements in the programmatic agreement to avoid impacts to sites, the Proposed Action will have no effect on cultural properties and values. In addition, implementation of this alternative will not affect tribal access to Federal lands within the project area.

***Endangered Species Act***

The Proposed Action for this project is the implementation of the action analyzed in the BA for Threatened and Endangered Species – Phase II Maintenance in Utility Corridors on Arizona Forests, February 2008, and subsequent concurrence with determination of effects identified in the BO issued by the USFWS in July 2008 (Consultation #22410-2007-F-0365) and in the BO issued on June 11, 2013 (Consultation #22410-2006-F-0365-R1). A review of these documents in conjunction with the EA for this project illustrates consistency between the action analyzed in the February 2008 BA and subsequent BOs, and the approved alternative for this project.

***Bald and Golden Eagle Protection Act***

If Bald or Golden Eagle nests are identified in the project area, seasonal restrictions on vegetation management and right-of-way maintenance in affected areas would be implemented

where applicable according to current USFWS protocol to comply with the Bald and Golden Eagle Protection Act.

### ***Clean Water Act***

The Proposed Action complies with the Non-point Source Intergovernmental Agreement signed by the Forest Service (Region 3) and the Arizona Department of Environmental Quality (ADEQ). By employing soil and water mitigation measures, this alternative will have little cumulative effect to perennial waters and is likely to prevent the accumulation of adverse watershed effects from a transmission-line initiated wildfire. Run-off control structures, diversion ditches, erosion-control structures, and energy dissipaters will be cleaned, maintained, repaired, and replaced to meet the standards set by applicable permits and the Storm Water Pollution Prevention Plan (SWPPP), or where such a plan is inapplicable, similar standards set by Western or the applicable federal land manager.

### ***Clear Air Act***

It was determined that the Proposed Action is not anticipated to cause disproportionate adverse human health or environmental effects to air quality. Any air quality impacts that would be caused by the mobile sources of emissions used to conduct Project activities would be minimal and local and would not cause regional changes to air quality.

### ***Energy Policy Act of 2005***

The Proposed Action is expected to move toward the direction in the Energy Policy Act to comply with applicable energy reliability standards developed in the National Electric Reliability Code. Updates to this code have specifically addressed the need for vegetation management in and adjacent to electric utility right-of-ways to ensure a safe and reliable operating system.

### ***Executive Order 12898 (Environmental Justice)***

Implementation of the Proposed Action is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations.

### ***Executive Order 13186 (Migratory Birds)***

Executive Order 13186 requires that an analysis be made of the effects of Forest Service actions on Species of Concern listed by Partners in Flight (PIF), the effects on Important Bird Areas (IBA) identified by Partners in Flight, and the effects to important over-wintering areas. The wildlife specialist analyzed the effects of project activities to migratory bird species and found that the Proposed Action will not change the existing forest trend for species of concern.

### ***Executive Order 13212 (Actions To Expedite Energy-Related Projects)***

Executive Order 13212, signed May of 2001, declares that executive departments and agencies (agencies) shall take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy.

## **Finding of No Significant Impact (FONSI)**

After considering the environmental effects described in the EA, I have determined that the actions described in Alternative 2 will not have a significant effect on the quality of the human

environment, considering the context of the project area and intensity or severity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following:

### **Context and Intensity**

This project is a site-specific action that by itself does not make international, national, regional or statewide decisions. The Forest Service proposes to manage vegetation on approximately 4,580 acres of the Coconino National Forest, which occurs in an area already disturbed from transmission line construction and maintenance since 1966. The scope of this decision is specific to the project area and adjacent communities and private land. Vegetation management in and adjacent to the transmission line right-of-ways will help ensure uninterrupted service of electrical power to nearby communities and cities.

The following discussion is organized around the ten intensity factors described in the National Environmental Policy Act regulations (40 CFR 1508.27) as they pertain to the context of the Glen Canyon–Pinnacle Peak 345 kV Transmission Lines Vegetation Management Project under the Proposed Action alternative:

1. Neither beneficial nor adverse effects are significant.

Direct, indirect, and cumulative effects of the project activities on various resources are disclosed and discussed in Chapter 3 of the EA and associated project record. While this decision is expected to result in impacts to some wildlife species and other resources such as scenic quality, these impacts are marginal considering the transmission lines were constructed in 1966 and vegetation has been managed within and adjacent to this corridor over the last 57 years. As a result this impact is not expected to rise to level of significance and will not significantly or adversely affect resources in the natural or human environment.

2. There will be no significant effects on public health and safety.

The Proposed Action was developed to address the threat of interruption of the provision of electrical power from wildfire or other interference from vegetation. The project conservation measures and mitigation measures included in this alternative will result in no significant effects to public health or safety.

3. There will be no significant effects on the unique characteristics of the area, such as historic or cultural resources, designated park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas (research natural areas).

There are no designated park lands, prime farmlands in the project area. The transmission line was built in 1966 and has been maintained for vegetation on an as-needed basis since that time. The Proposed Action may include some effects on wild and scenic rivers, or ecologically critical areas in or around the project area, however, since these activities are not new the effects are likely to be very minor. Historic and cultural resources are numerous on the Coconino National Forest and have been found within the project area. The project conservation measures and mitigation measures of the Proposed Action will result in no significant effects to these unique

resources (See Chapter 2 of the EA, Design Features). A variety of wetland types occur within the project area. Project conservation measures will result in no significant effects to wetlands (see Chapter 3 of the EA, Water Resources).

4. The effects on the quality of the human environment are not likely to be highly controversial.

This factor pertains to any disagreement between experts in a given field over the potential effects of this proposal. Public concerns and input have been considered throughout the analysis process, resulting in the refinement of the Proposed Action. For this project, we considered and reviewed numerous publications and research in support of and in opposition to our conclusions about effects to vegetation, wildlife, and other forest resources. We also integrated studies, monitoring results, and published research findings to support our analysis. For this project, I find that the best available science was used and that the effects on the quality of human environment are not likely to be highly controversial from a scientific or technical standpoint. These effects are documented in the EA and are typical for the action proposed (see Chapter 3 of the EA, Environmental Consequences).

5. The degree of possible effects on the human environment is not highly uncertain, nor are there unique or unknown risks involved.

The effects analysis in Chapter 3 of the EA discloses the effects related to vegetation treatments. The selected actions under the Proposed Action are routine in nature, implementing standard practices and protection measures and the effects are well known (see Chapter 3 of the EA, Environmental Consequences). These effects are not uncertain, and do not involve unique or unknown risk on the human environment.

6. The action is not likely to establish a precedent for future actions with significant effects.

Vegetation management projects that implement similar actions have occurred in the project area over the past 57 years and in various other areas across the Coconino National Forest, as well as on private and State lands over the recent past. Furthermore, vegetation management within the corridor has been ongoing since 1966, when the transmission facilities were constructed. As a result, this decision is not expected to establish a precedent that would lead to future actions with significant effects.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The cumulative impacts to different resource areas are discussed and disclosed in Chapter 3 of the EA. None of the effects are determined to be cumulatively significant.

Vegetation treatment, surveys, and transmission line repair work have regularly occurred within the project area for the past 57 years. This decision will not result in new impacts; but rather allows for a more effective, efficient, and forward-thinking management of the transmission corridor. While this decision may include impacts to some wildlife species, scenic resources, and other resources as disclosed in the Environmental Assessment, these impacts are not expected to

result in a cumulatively significant impact due to the project conservation measures and the fact that this decision will not result in new, additional impacts that were previously not occurring.

8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places.

Historic and prehistoric resources are numerous on the Coconino National Forest and have been found within the project area. Western conducted cultural resource investigations to prepare a complete inventory of archaeological sites, and historic buildings and structures, located within or near the Project rights-of-way and access roads. The inventory efforts included a comprehensive literature search to identify and evaluate previous survey and site recording efforts, as well as an intensive pedestrian field survey of the Project rights-of-way and access roads. Due to the high density of sites in the northernmost seven miles of the Project, sites in that area are scheduled for future recordation in accordance with a programmatic agreement (PA) (currently in preparation) among Western, CNF, SHPO, and interested tribes. Based on the project conservation measures in the Proposed Action and the requirements in the programmatic agreement to avoid impacts to sites, the Proposed Action will have no effect on cultural properties and values. In addition, implementation of this alternative will not affect tribal access to Federal lands within the project area.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The Proposed Action for this project is the implementation of the action analyzed in the BA for Threatened and Endangered Species – Phase II Maintenance in Utility Corridors on Arizona Forests, February 2008, and subsequent concurrence with determination of effects identified in the BOs issued by the USFWS in July 2008 (Consultation #22410-2007-F-0365) and June 11, 2013 (Consultation #22410-2006-F-0365-R1). The BA and corresponding BOs analyzed both mechanical and manual removal of vegetation within the rights-of-way, and manual removal of danger trees up to 60' beyond the outer edge of the right-of-way for 345 kV transmission lines (pages 15 through 19 of the BA). The proposed action for Western's project mirrors the content of the BA to ensure the consistency and validity of the determinations of affect identified for biological resources in the project area. In addition, the Proposed Action includes project conservation measures to incorporate the terms and conditions of the 2012 Coconino National Forest Land and Resource Management Plan, specifically to avoid and minimize impacts to the Mexican spotted owl.

This decision is expected to reduce impacts to the Threatened Mexican spotted owl because it would reduce the potential for emergency situations, which often results in vegetation removal during the breeding season or multiple entries into Mexican spotted owl habitat. Using a proactive approach as identified in this decision would reduce the amount of Mexican spotted owl disturbance within and adjacent to the transmission lines. As a result, this alternative would not result in any impacts to threatened or endangered species or critical habitat resulting in adverse effects.

10. The action will not violate any Federal, State, or local law or requirement imposed for the protection of the environment.

The Proposed Action is consistent with applicable Federal, State, and local laws for protecting the environment.

## Implementation

This project may be implemented five business days following the close of the appeal filing period established by the legal notice of decision in the *Arizona Daily Sun* if no appeals are filed. If an appeal is filed, implementation may occur on, but not before, 15 business days following the date of the last appeal disposition.

## Administrative Review or Appeal Opportunity

This decision is subject to appeal pursuant to regulations at 36 CFR 215. Individuals or organizations who provided comment or otherwise expressed interest in the proposed action during the comment period may appeal. Interest expressed or comments provided on this project prior to or after the close of the comment period do not have standing for appeal purposes.

The appeal must be filed (regular mail, fax, email, hand-delivery, express delivery, or messenger service) with the appropriate Appeal Deciding Officer. Submit appeals to:

Calvin N. Joyner, Regional Forester  
Southwestern Region  
333 Broadway Blvd. SE  
Albuquerque, NM 87102  
FAX: (505) 842-3173

If hand delivered, the appeal must be received at the above address during business hours (Monday - Friday 8:00 am to 4:30 pm), excluding holidays. Electronic appeals may be submitted to: [appeals-southwestern-regional-office@fs.fed.us](mailto:appeals-southwestern-regional-office@fs.fed.us) with .doc, .docx, .rtf, .pdf, or .txt formats only. The appeal must have an identifiable name attached or verification of identity will be required. Names and addresses of appellants will become part of the public record. A scanned signature may serve as verification on electronic appeals. Upon receipt of an electronically-mailed appeal, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive an automated electronic acknowledgement, it is the sender's responsibility to ensure timely receipt by other means.

Appeals, including attachments, must be in writing, fully consistent with 36 CFR 215.14, and filed (postmarked) within 45 days following the date the legal notice is published in the *Arizona Daily Sun*. The publication date is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframes provided by any other source.

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15<sup>th</sup> business day following the date of the last appeal disposition.

## Contact Person

Additional information regarding this project can be obtained from Mike Dechter, Forest NEPA Coordinator, Coconino National Forest at [mdechter@fs.fed.us](mailto:mdechter@fs.fed.us) or (928) 527-3416.

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M. EARL STEWART  
Forest Supervisor  
Coconino National Forest

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Date

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## Appendix A

### Definition of Mexican spotted owl restricted and protected habitat included in the Glen Canyon-Pinnacle Peak 345kV Transmission Line Project

The Glen Canyon-Pinnacle Peak 345kV Transmission Line project includes requirements to survey for activities within ½ mile of potential Mexican spotted owl habitat per Forest Plan direction. Potential MSO habitat is interpreted to mean Restricted and Protected habitat and other forest and woodland types as discussed on Replacement Page 65 of the Coconino National Forest Plan.

Restricted and Protected Mexican spotted owl habitat was defined according to the Four Forest Restoration initiative and in addition any Potential Natural Vegetation Types with mixed conifer or aspen were also included. This resulted in three areas with Mexican spotted owl potential habitat along the transmission line that would require survey prior to treatments that occur outside of emergency situations. These three areas include approximately 8 miles of the 90 mile transmission line, or less than 10 percent of the area. One area near Long Valley, one area near the West Clear Creek Wilderness, and the very southern extent of the line where it crosses Fossil Creek and the Verde River.

The Four Forest Restoration Initiative used a comprehensive process to define restricted habitat throughout the Coconino and South Kaibab National Forests. This included a landscape-scale approach to defining Restricted and Protected habitat as described below, and is seen as appropriate for use in this project. The process used for defining restricted habitat is described in pp. 31-34 of the Four Forest Restoration Project Wildlife Specialist Report – “Restricted areas include all mixed-conifer, pine-oak, and riparian forests outside of protected areas.”

“Working closely with the US Fish and Wildlife Service (“FWS”) and wildlife biologists from both National Forests, we reviewed restricted habitats in the greater 4FRI area. The area under consideration constituted the majority of two National Forests. A new restricted layer was created within the 4FRI treatment area, including designation of target and threshold habitat as described in the Recovery Plan. Restricted habitat was primarily designated on the Flagstaff and Williams Ranger Districts (RDs), each of which represent the land base of two historic RDs later combined into today’s management configuration. Restricted habitat also included portions of the Mogollon Rim RD. This landscape scale approach better meets the goal of providing continuous replacement nesting and roosting habitat over *space* and time, as described in the Recovery Plan and the 1996 ROD.”

To accomplish this effort, meetings were held among wildlife biologists from the FWS, both NFs, and members of the 4FRI team starting on March 4<sup>th</sup>, 2011. A strategy was developed from these meetings for designating new target and threshold habitat across the 4FRI treatment area. This effort did not include habitat in current or recent projects or within mixed conifer habitat because those acres are not part of the 4FRI treatment area. Following Recovery Plan and 1996 ROD guidelines, we identified the best restricted habitat as target and threshold habitat across the 4FRI project area rather than looking at individual RDs or NFs... Because of the marked difference

between MSO occupancy between the NFs [Coconino and Kaibab], we focused designation of target and threshold habitat on the Coconino NF where MSOs are common in pine-oak habitat.

To be sure to identify the best candidate stands as restricted habitat, data from the Kaibab and Coconino NFs (based on polygons) was merged with pine-oak data from the Lab of Landscape Ecology and Conservation Biology (raster data; Dr. Steve Sesnie and Jill Rundall, Northern Arizona University) to create one GIS layer (see project record for additional information). Existing or potential nesting and roosting habitat within this new layer was stratified with the following queries:

- Pine - oak stands with 150 BA or greater
- Stands with oak 5 inches diameter or greater at root crown (drc) occurring as at least 10 percent of the trees or greater than or equal to 10 BA based on oak at least five inches diameter or greater at root crown (drc)
- Percent of trees 12 to 18 inches dbh and trees greater than 18 inches dbh
- At least 20 tpa 18 inches dbh or greater
- Stands with northerly aspects (assumed to be more sustainable), ranging from 292° to 67° (WNW to ENE)

This subset of stands was then further stratified to identify target and threshold (i.e. future nesting and roosting) habitat by querying stand data in terms of:

- Trees 18 to 24 inches dbh and trees greater than 24 inches dbh
- Oak 5-12" drc and oak greater than 12" drc.
- At least 20 percent BA for oak greater than five inches drc
- Identifying slopes 0-20 percent, 20-40 percent, and slopes greater than 40 percent (steeper slopes were assumed to support moister site conditions that would be more sustainable for dense forests through time; slopes greater than 40 percent were separated out as protected habitat)

The results of the queries generally identified stands with appropriate habitat structure. They were reviewed on March 11<sup>th</sup>, 2011 by biologists with on-the-ground familiarity for both the Coconino and Kaibab NFs. This review was to ensure that: stands also provided the best functional habitat, e.g., stands were dropped from consideration when: it was discovered that remotely-sensed data sometimes misidentified juniper as oak in the understory (this was a problem on the Williams RD near Sycamore Canyon); stands were adjacent to newly designated 300 foot parking areas for campers on the Coconino NF under the Travel Management Rule finalized in September, 2011; where apparently contiguous blocks of habitat were fragmented by roads and/or power-lines; or if stands were adjacent to likely haul routes for removing logs and forest products during 4FRI project implementation.

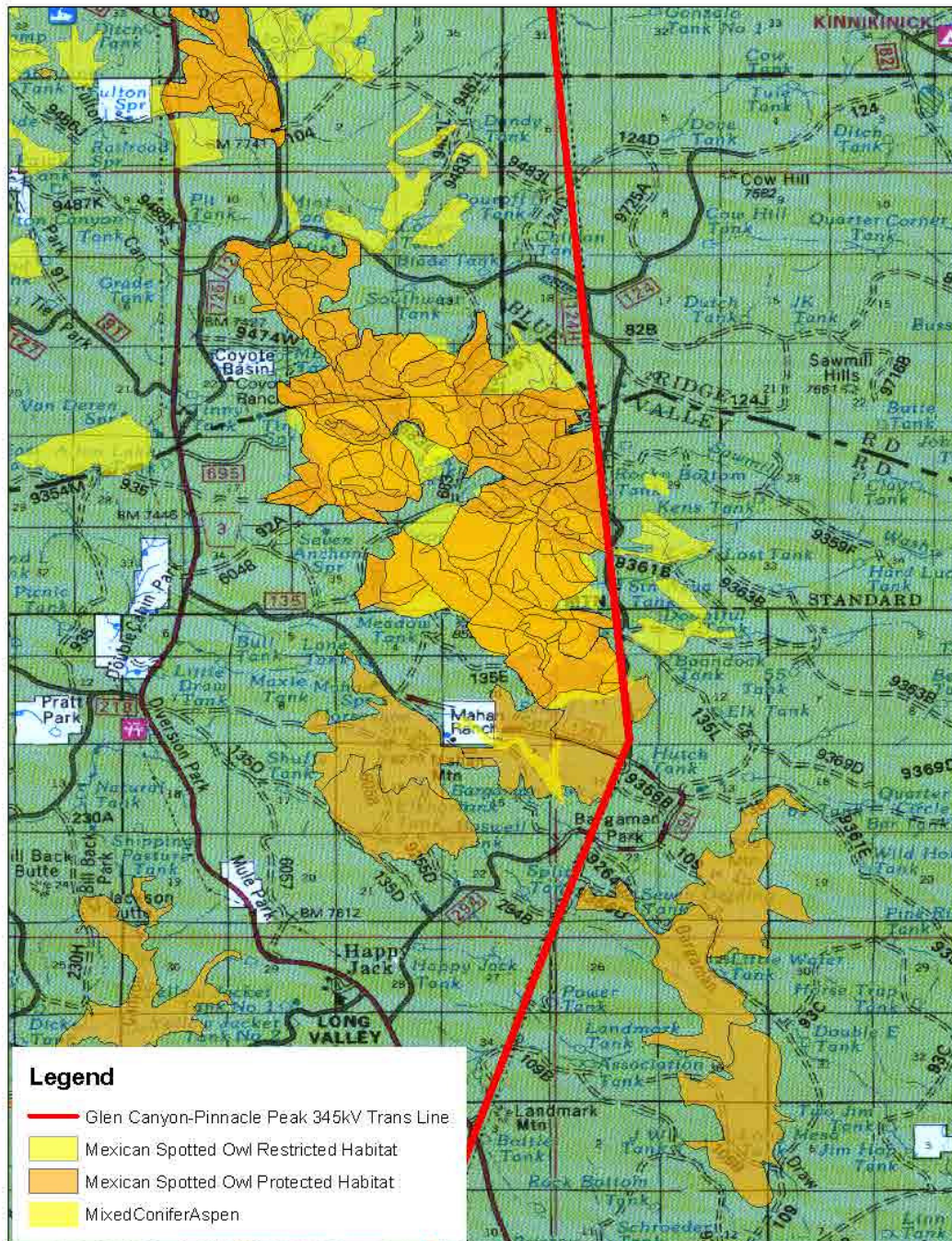
The strategy in designating restricted habitat was to provide well distributed habitat that included strategically located blocks that could potentially function as future PACs (i.e., “ensure a sustained level of owl nest/roost habitat” and “[c]reate replacement owl nest/roost habitat where appropriate” per the amended forest plans) and/or support landscape connectivity for MSOs. Blocks of habitat were also designated with the intent of providing “stepping-stones” to facilitate

owl dispersal and connect areas capable of supporting future nesting and roosting habitat per the Recovery Plan. However, small, scattered stands of isolated habitat in a matrix of non-MSO habitat would not be expected to support owls or provide connectivity and were dropped even if the above queries identified them as quality habitat, i.e., results from the above criteria was assessed in terms of ecological function in addition to meeting the query criteria.

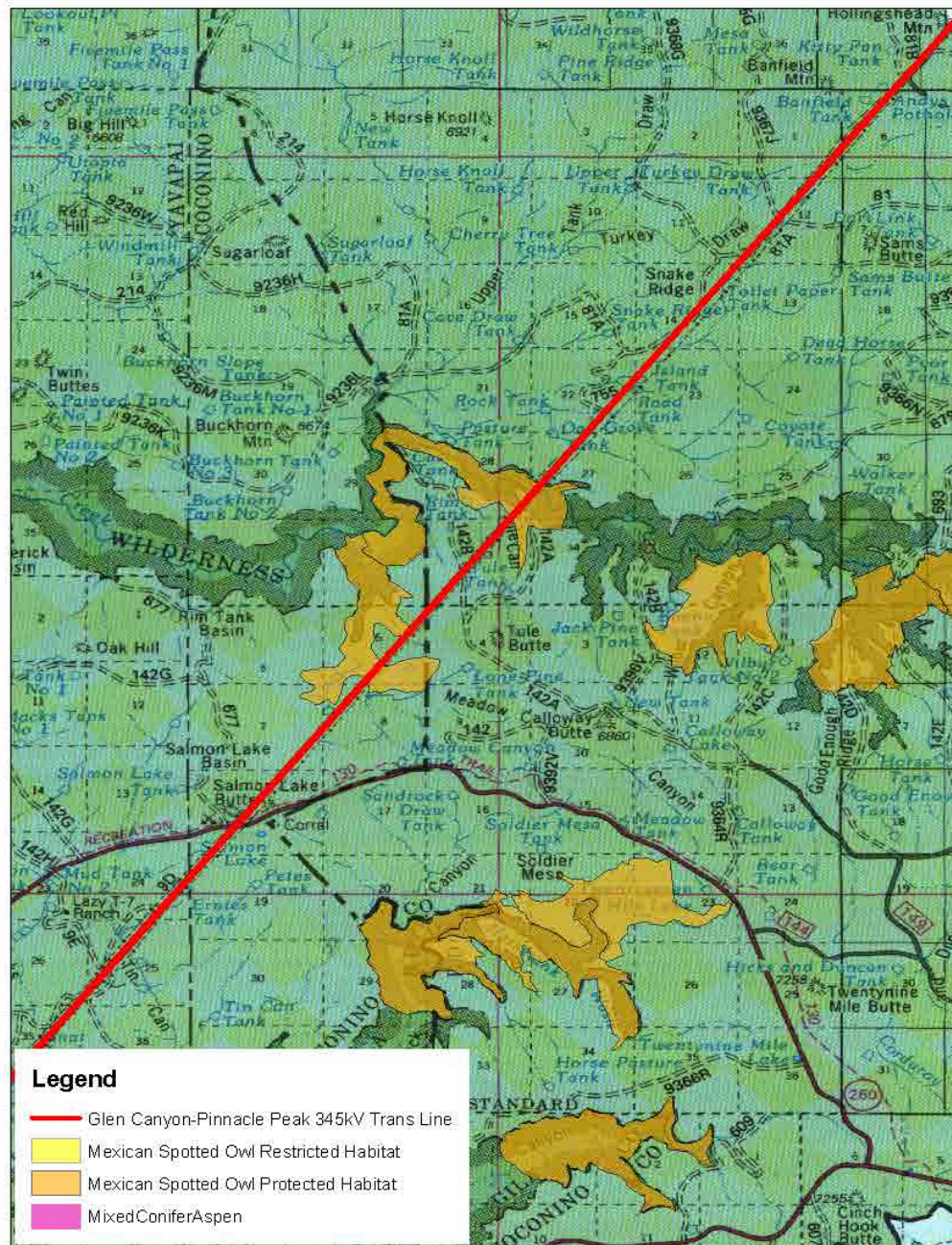
Proximity to PAC habitat was also an evaluation criterion. We sought to augment PAC habitat by identifying nearby pine-oak stands as restricted habitat with the assumption that known or suspected owl use indicated high quality habitat. Areas ranging from the northwest to the southeast of PACs were also closely evaluated for inclusion as restricted habitat. Fire potential was also considered in developing the spatial configuration of MSO habitat on the landscape. Predominant winds are from the southwest, so we rarely identified additional MSO habitat southwest of existing PACs unless stands were on northerly aspects. Because of the fire potential, areas southwest of PACs were reevaluated for treatments that would reduce the risk of high-severity fires entering PACs. A final emphasis was placed on removing stands misclassified as restricted habitat so that designated areas would function as MSO habitat. A subset of selected stands was reviewed in the field in autumn, 2011 as quality control.

Since the Four Forest Restoration Initiative focused the definition of restricted habitat in Ponderosa Pine type vegetation, the Coconino National Forest Mixed Conifer and Mixed Conifer and Aspen Potential Natural Vegetation Types were added to those areas needing survey within a ½ mile of potential Mexican spotted owl habitat for Glen Canyon-Pinnacle Peak 345 kV Transmission Line work that does not include strictly hazard vegetation removal as defined under the 2008 Biological Opinion.

In addition, protected habitat would also need survey when within ½ mile of vegetation management activities associated with the transmission line. Protected habitat, consists of Protected Activity Centers (PACs), slopes greater than 40 percent where timber harvest has not occurred in the last 20 years (steep slopes), and reserved lands which include wilderness, research natural areas, wild and scenic rivers, and congressionally recognized wilderness study areas. Thus treatment activities within ½ mile of Fossil Creek Wild and Scenic River and the Verde Wild and Scenic River would also require survey prior to treatments.



**Figure 1.** Restricted and Protected Mexican spotted owl habitat within a half mile of the Glen Canyon-Pinnacle Peak 345kV Transmission Line near Long Valley



**Figure 2.** Restricted and Protected Mexican spotted owl habitat within a half mile of the Glen Canyon-Pinnacle Peak 345kV Transmission Line near West Clear Creek Wilderness